

SEQUENCE LISTING

<110> ZHONG, PINGYU LUO, PEIZHI WANG, KEVIN C. HSIEH, MARK LI, YAN

- <120> HUMANIZED ANTIBODIES AGAINST VASCULAR ENDOTHELIAL GROWTH FACTOR
- <130> AX0001ID
- <140> 10/723,434
- <141> 2003-11-26
- <150> 10/443,134
- <151> 2003-05-20
- <150> 10/153,159
- <151> 2002-05-20
- <150> 10/153,176
- <151> 2002-05-20
- <150> 10/125,687
- <151> 2002-04-17
- <150> 60/284,407
- <151> 2001-04-17
- <160> 443
- <170> PatentIn version 3.5
- <210> 1
- <211> 107
- <212> PRT
- <213> Artificial Sequence
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- <223> Description of Artificial Sequence: Synthetic polypeptide
- <400> 1
- Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 5 10 15
- Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr 20 25 30
- Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Val Leu Ile 35 40 45
- Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

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<223> Description of Artificial Sequence: Synthetic polypeptide

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Asp Ile Glu Leu Thr Gln Ser Pro Ser Ser Leu Ser Val Ser Ala Gly 1 5 10 15

Asp Arg Val Thr Ile Ser Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Arg Val Leu Ile 35 40 45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Tyr Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

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Asp Ile Glu Leu Thr Gln Ser Pro Ser Ser Leu Ser Val Thr Pro Gly 1 5 10 15

Glu Arg Ala Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Gln Val Leu Ile 35 40 45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Asp Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala 70 75 80

Glu Asp Phe Ala Ile Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
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Asp Ile Glu Leu Thr Gln Ser Pro Ser Ser Leu Ser Val Thr Pro Gly
1 5 10 15

Glu Arg Ala Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Gln Leu Leu Ile 35 40 45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Asp Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Gln Ala 65 70 75 80

Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
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Glu Arg Val Thr Ile Ser Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro His Leu Leu Ile 35 40 45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Tyr Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala 70 75 80

Glu Asp Phe Ala Ala Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys 100 105

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Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Thr Pro Gly 1 5 10 15

Glu Arg Val Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Val Leu Ile 35 40 45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Asp Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
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Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Thr Pro Gly
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Glu Arg Val Thr Ile Ser Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Ser Leu Leu Val 35 40 45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Gln Ala 65 70 75 80

Glu Asp Phe Ala Ile Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp 85 90 95 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
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Asp Ile Val Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Thr Pro Gly
1 5 10 15

Asp Arg Val Thr Ile Ser Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Gln Leu Leu Ile 35 40 45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala 65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
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Asp Ile Val Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Thr Pro Gly 1 5 10 15

Glu Arg Ala Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro His Leu Leu Ile $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Tyr Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala 65 70 75 80

Glu Asp Phe Ala Ile Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp \$85\$ 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

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<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 10

Asp Ile Glu Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Thr Pro Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Arg Val Leu Ile $35 \hspace{1cm} 40 \hspace{1cm} 45$

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Gln Pro 65 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys

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<400> 11

Asp Ile Glu Met Thr Gln Ser Pro Ser Ser Leu Ser Val Thr Pro Gly 1 5 10 15

Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro His Leu Leu Ile 35 40 45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Asp Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys 100 105

<210> 12

<211> 107

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<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 12

Asp Ile Glu Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Thr Leu Gly
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Glu Arg Val Thr Ile Ser Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro His Val Leu Ile $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Gln Ala 70 75 80

Glu Asp Val Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys 100 105

<210> 13

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<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 13

Asp Ile Glu Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Val Leu Ile 35 40 45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Asp Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105

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<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 14

Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Ala Gly
1 5 10 15

Asp Arg Val Thr Ile Ser Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Gln Leu Leu Ile 35 40 45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
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<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 15

Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Ile Ser Cys Asn Ala Ser Gln Ser Ile Gly Thr Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Gln Val Leu Ile 35 40 45

Tyr Gly Ala Ser Asn Leu Ala Ser Gly Val Pro Gly Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Lys Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys 100 105

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<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 16

Glu Arg Ala Thr Ile Ser Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Gln Val Leu Ile $35 \hspace{1cm} 40 \hspace{1cm} 45$

Tyr Gly Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ser Ser Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys 100 105

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<211> 107

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 17

Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly 1 5 10 15

Glu Arg Ala Thr Ile Thr Cys His Ala Ser Gln Ser Ile Gly Thr Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro His Val Leu Ile 35 40 45

Tyr Gly Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly 50 55 60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 75 80

Asp Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Thr Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys 100 105

<210> 18

<211> 107

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 18

Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
1 10 15

Glu Arg Ala Thr Ile Thr Cys His Ala Ser Gln Ser Ile Ser Thr Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Gln Val Leu Ile 35 40 45

Tyr Asp Ala Ser Asn Leu Ala Ser Gly Val Pro Gly Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Ala Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys 100 105

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<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 19

Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
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Glu Arg Ala Thr Ile Thr Cys Lys Ala Ser Gln Ser Ile Gly Thr Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Val Leu Ile 35 40 45

Tyr Asp Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly 50 55 60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ser Ser Thr Pro Tyr
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys 100 105

<210> 20

<211> 107

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic polypeptide

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Glu Arg Ala Thr Ile Ser Cys Lys Ala Ser Gln Ser Ile Gly Ser Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Ser Val Leu Ile 35 40 45

Tyr Ala Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly 50 55 60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Tyr Ser Gly Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys 100 105

<210> 21

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<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 21

Asp Ile Lys Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Ile Thr Cys Asn Ala Ser Gln Ser Ile Ser Thr Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Lys Val Leu Ile 35 40 45

Tyr Gly Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Ala Pro Trp 85 90 95 Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
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<210> 22

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<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 22

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1 10 15

Glu Arg Ala Thr Ile Ser Cys Lys Ala Ser Gln Ser Ile Gly Ser Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Val Leu Ile 35 40 45

Tyr Ser Ala Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Thr Pro Trp \$85\$ 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

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<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 23

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1 10 15

Glu Arg Ala Thr Ile Ser Cys Lys Ala Ser Gln Ser Ile Gly Thr Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Val Leu Ile 35 40 45

Tyr Asp Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly 50 55 60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Tyr Ser Thr Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Ala Ile Lys 100 105

<210> 24

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 24

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1 10 15

Glu Arg Ala Thr Ile Ser Cys Lys Ala Ser Gln Ser Ile Gly Thr Tyr
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Val Leu Ile 35 40 45

Tyr Ser Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ser Ser Thr Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys 100 105 <210> 25

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<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 25

Glu Arg Ala Thr Ile Thr Cys His Ala Ser Gln Ser Ile Ser Ser Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Asn Val Leu Ile $35 \hspace{1cm} 40 \hspace{1cm} 45$

Tyr Gly Ala Ser Asn Leu Ala Ser Gly Val Pro Asp Arg Phe Ser Gly 50 55 60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Thr Pro Trp \$85\$ 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 26

<211> 107

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<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic polypeptide

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Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly 5 10 15

Glu Arg Ala Thr Ile Thr Cys His Ala Ser Gln Ser Ile Ser Thr Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Val Leu Ile 35 40 45

Tyr Gly Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Ala Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys 100 105

<210> 27

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<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 27

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1 10 15

Glu Arg Ala Thr Ile Thr Cys Lys Ala Ser Gln Ser Ile Ser Thr Tyr
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Gln Val Leu Ile 35 40 45

Tyr Asp Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Ala Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys 100 105

<210> 28

<211> 107

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic polypeptide

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Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly 1 5 10 15

Glu Arg Ala Thr Ile Thr Cys Asn Ala Ser Gln Ser Ile Gly Ser Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Lys Val Leu Ile 35 40 45

Tyr Gly Ala Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Thr Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys 100 105

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<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 29

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Ile Thr Cys Asn Ala Ser Gln Ser Ile Gly Thr Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Asn Leu Leu Ile 35 40 45

Tyr Asp Ala Ser Asn Leu Ala Ser Gly Val Pro Gly Arg Phe Ser Gly 50 55 60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Ser Ser Thr Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

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<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 30

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly 1 5 10 15

Glu Arg Ala Thr Ile Thr Cys Asn Ala Ser Gln Ser Ile Gly Thr Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Asn Val Leu Ile 35 40 45

Tyr Asp Ala Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Tyr Ser Ala Pro Trp
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys 100 105

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<212> PRT

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<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 31

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Glu Arg Ala Thr Ile Thr Cys Asn Ala Ser Gln Ser Ile Ser Thr Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Val Leu Ile $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Tyr Gly Ala Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Thr Pro Trp
85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys 100 105

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<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 32

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1 10 15

Glu Arg Ala Thr Ile Thr Cys Gln Ala Ser Gln Ser Ile Ser Thr Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Lys Val Leu Ile 35 40 45

Tyr Asp Ala Ser Asn Leu Ala Ser Gly Val Pro Gly Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Thr Pro Trp

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys

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<400> 33

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1 10 15

Glu Arg Ala Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Thr Tyr
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile 35 40 45

Tyr Ser Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly 50 55 60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Tyr Ser Thr Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys 100 105

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<400> 34

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Ile Thr Cys Ser Ala Ser Gln Ser Ile Gly Thr Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Ser Val Leu Ile 35 40 45

Tyr Gly Ala Ser Asn Leu Ala Ser Gly Val Pro Gly Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala 65 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Asn Ser Ala Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

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<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 35

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Glu Arg Ala Thr Ile Thr Cys Ser Ala Ser Gln Ser Ile Ser Thr Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Gln Val Leu Ile 35 40 45

Tyr Ala Ala Ser Asn Leu Ala Ser Gly Val Pro Asn Arg Phe Ser Gly 50 55 60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 70 75 80

Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Tyr Ser Thr Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
100 105

<210> 36

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 36

Ala Ile Arg Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Asp Thr Val Thr Ile Ala Cys Arg Ala Ser Gln Ala Ile Arg Asn Asp 20 25 30

Leu Thr Trp Tyr Gln Gln Lys Pro Gly Thr Ala Pro Lys Leu Leu Ile 35 40 45

Tyr Gly Ala Thr Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Ser Thr Thr Pro Trp
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Asp Ile Lys
100 105

<210> 37

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 37

Asp Ile Val Met Thr Gln Thr Pro Ser Ser Leu Ser Ala Ser Val Gly
1 10 15

Asp Thr Val Thr Ile Thr Cys Arg Ala Ser Arg Asp Ile Arg Asn Asp 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Glu Leu Leu Ile 35 40 45

Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Asp Ile Lys
100 105

<210> 38

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 38

Glu Ile Val Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Ile Gly
1 10 15

Asp Arg Val Ala Ile Thr Cys Arg Ala Ser Arg Asp Ile Thr Thr Asp 20 25 30

Leu Ala Trp Tyr Gln Gln Ile Pro Gly Lys Ala Pro Lys Leu Leu Ile 35 40 45

Tyr Ala Ala Ser Arg Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 50 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Ala Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Asp Ile Lys
100 105

- <210> 39
- <211> 107
- <212> PRT
- <213> Artificial Sequence
- <220>
- <223> Description of Artificial Sequence: Synthetic polypeptide
- <400> 39
- Glu Ile Val Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 10 15
- Asp Arg Ile Thr Ile Thr Cys Arg Ala Ser Arg Asp Ile Arg Asp Asp 20 25 30
- Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Val Leu Ile $35 \hspace{1cm} 40 \hspace{1cm} 45$
- Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60
- Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80
- Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp 85 90 95
- Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
- <210> 40
- <211> 107
- <212> PRT
- <213> Artificial Sequence
- <220>
- <223> Description of Artificial Sequence: Synthetic polypeptide
- <400> 40
- Glu Ile Val Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
 1 10 15
- Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Thr Tyr 20 25 30
- Ile Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile 35 40 45

Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Thr Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Arg Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys 100 105

<210> 41

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 41

Glu Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ala Ile Tyr Asp Tyr 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Asn Leu Leu Ile 35 40 45

Tyr Ala Ala Ser Arg Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Asp Ile Lys
100 105

<210> 42

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 42

Glu Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp Ile Arg Lys Asp 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Ile Ala Pro Lys Val Leu Ile $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Thr Tyr Cys Gln Gln Ser Tyr Ser Pro Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys 100 105

<210> 43

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 43

Glu Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly 1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Thr Tyr 20 . 25 30

Ile Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Thr Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Arg Ser Leu Gln Pro 65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys 100 105

<210> 44

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 44

Glu Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Thr Val Thr Ile Ala Cys Arg Ala Ser Arg Asp Ile Arg Asn Asp 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile 35 40 45

Tyr Ala Ala Ser Arg Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Thr Gly Ser Gly Thr Asp Phe Ala Leu Thr Ile Ser Ser Leu Gln Pro 65 70 75 80

Glu Asp Ser Ala Ser Tyr Tyr Cys Gln Gln Ser Tyr Thr Ile Pro Trp 85 90 95

Thr Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys
100 105

<210> 45

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 45

Glu Thr Thr Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Asp Thr Ile Thr Ile Ser Cys Arg Ser Ser Gln Pro Ile Thr Asn Asp 20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Asn Leu Leu Ile $35 \hspace{1cm} 40 \hspace{1cm} 45$

Tyr Ala Ala Ser Arg Leu Gln Gly Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Trp

85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys 100 105

<210> 46

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 46

Leu Pro Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln 1 5 10 15

Arg Val Thr Ile Ser Cys Ser Gly Ser Thr Ser Asn Ile Gly Ser Asn 20 25 30

Pro Val Asn Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu 35 40 45

Ile Tyr Ser Asn Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Leu Ser
50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Leu 65 70 75 80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ser Trp Asp Asp Ser Leu 85 90 95

Thr Gly Tyr Val Phe Gly Thr Gly Thr Gln Leu Thr Val Leu 100 105 110

<210> 47

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 47

Leu Pro Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln 1 5 10 15

Arg Val Thr Ile Ser Cys Ser Gly Ser Tyr Ser Asn Ile Gly Ser Asn 20 25 30

Ala Val Asn Trp Tyr Gln Gln Leu Pro Gly Ala Ala Pro Lys Val Leu 35 40 45

Met Tyr Thr Asn Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser 50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Arg 65 70 75 80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu 85 90 95

Asn Gly Tyr Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu 100 105 110

<210> 48

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 48

Asn Phe Met Leu Thr Gln Pro Pro Ser Thr Ser Gly Thr Pro Gly Gln 1 $$ 5 $$ 10 $$ 15

Arg Val Thr Ile Ser Cys Ser Gly Ser Thr Ser Asn Ile Gly Ser Asn 20 25 30

Ser Val Thr Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Val Leu $35 \hspace{1cm} 40 \hspace{1cm} 45$

Met Tyr Thr Asn Asn Gln Arg Pro Ser Gly Val Pro Glu Arg Phe Ser 50 60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln 65 70 75 80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu 85 90 95

Asn Gly Tyr Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110$

<210> 49

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 49

Gln Ala Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln 1 5 10 15

Ser Val Thr Ile Ser Cys Ser Gly Thr Thr Ser Asn Ile Gly Ser Asn 20 25 30

Ser Val Asn Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Val Leu 35 40 45

Ile Tyr Gly Asn Asp Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
50 55 60

Gly Ser Arg Ser Ala Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln 65 70 75 80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu 85 90 95

Ser Gly Tyr Val Phe Gly Ala Gly Thr Gln Leu Thr Val Leu 100 105 110

<210> 50

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 50

Gln Pro Val Leu Thr Gln Pro Pro Ser Ala Ser Ala Thr Pro Gly Gln 1 10 15

Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn 20 25 30

Pro Val Asn Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Val Leu 35 40 45

Ile Tyr Ser Asn Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln 65 70 75 80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu 85 90 95

Ser Gly Tyr Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu 100 105 110

<210> 51

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 51

Gln Pro Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
1 10 15

Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Val Gly Arg Asn 20 25 30

Thr Val Asn Trp Tyr Gln Gln Phe Pro Gly Thr Ala Pro Lys Phe Leu $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Met Tyr Gly Asn Asp Glu Arg Pro Ser Gly Val Pro Asp Arg Phe Ser 50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln 65 70 75 80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Thr Trp Asp Asp Ser Leu 85 90 95

Asn Gly Tyr Val Phe Gly Thr Gly Thr Gln Leu Thr Val Leu 100 105 110

<210> 52

<211> 110

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 52

Gln Pro Val Leu Thr Gln Pro Pro Ser Thr Ser Gly Thr Pro Gly Gln 1 5 10 15

Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn 20 25 30

Ser Val Thr Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Val Leu 35 40 45

Met Tyr Thr Asn Asn Gln Arg Pro Ser Gly Val Pro Glu Arg Phe Ser 50 60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln 65 70 75 80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu 85 90 95

Ser Gly Tyr Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu 100 105 110

- <210> 53
- <211> 110
- <212> PRT
- <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 53

Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
1 10 15

Arg Val Thr Ile Ser Cys Ser Gly Ser Asn Ser Asn Ile Gly Ser Asn 20 25 30

Asn Val Tyr Trp Tyr Gln Gln Phe Pro Gly Thr Ala Pro Lys Val Leu $35 \hspace{1cm} 40 \hspace{1cm} 45$

Ile Tyr Gly Asn Asn Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
50 55 60

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Gln 65 70 75 80

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Gly Ala Trp Asp Asp Ser Leu 85 90 95

Asn Gly Tyr Val Phe Gly Thr Gly Thr Lys Leu Thr Val Leu 100 105 110

<210> 54

<211> 111

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 54

Gln Ser Ala Leu Thr Gln Pro Pro Ser Val Ser Gly Ala Pro Gly Gln
1 10 15

Arg Val Thr Ile Ser Cys Thr Gly Arg Ser Ser Asn Ile Gly Ala Gly 20 25 30

His Asp Val His Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu 35 40 45

Leu Ile Tyr Ala Asn Asp Gln Arg Pro Ser Gly Val Pro Asp Arg Phe 50 55 60

Ser Asp Ser Lys Ser Gly Thr Ser Ala Ser Leu Gly Ile Ser Gly Leu 65 70 75 80

Arg Ser Glu Asp Glu Ala Asp Tyr Phe Cys Ala Thr Trp Asp Asp Ser 85 90 95

<210> 55

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 55

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

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<210> 56
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<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 56

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Thr His Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Thr Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 57

<211> 123

<212> PRT

<213> Artificial Sequence

<2205

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 57

Glu Gly Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly
1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 58

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 58

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Ile Ser Leu Asp Asn Ser Lys Ser Gln Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95 Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Ala Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 59

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 59

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Thr Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Asn Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 60

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Arg Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser

<210> 61

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 61

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asp Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 62

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 62

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Ala Leu Asp His Phe 20 25 30

Gly Leu Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115

- <210> 63
- <211> 123
- <212> PRT
- <213> Artificial Sequence
- <220>
- <223> Description of Artificial Sequence: Synthetic polypeptide
- <400> 63
- Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15
- Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Tyr Asn Tyr 20 25 30
- Gly Ile Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45
- Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala His Glu Phe 50 60
- Thr Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80
- Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95
- Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110
- Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120
- <210> 64
- <211> 123
- <212> PRT
- <213> Artificial Sequence
- <220>
- <223> Description of Artificial Sequence: Synthetic polypeptide
- <400> 64
- Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
 1 5 10 15
- Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Ser Leu Asp His Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 65

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 65

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Asn Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 66

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 66

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 60

Lys Arg Arg Phe Thr Ile Ser Leu Asp Asn Ser Lys Ser Thr Val Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 67

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser

<210> 68

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 68

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asn Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 69

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 69

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Asn Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120 <210> 70

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 70

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 71

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 71

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 10 15

Ser Leu Arg Leu Thr Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Asn Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys $85 \hspace{1cm} 90 \hspace{1cm} 95$

Ala Arg Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 72

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 72

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Thr Cys Ala Val Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Ile Ser Arg Asp Thr Ser Lys Asn Gln Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95 Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 73

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 73

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 5 10 15

Thr Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val $35 \hspace{1cm} 40 \hspace{1cm} 45$

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 74

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Thr Leu Arg Leu Thr Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 75

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 75

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Thr Leu Arg Leu Thr Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 76

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 76

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Thr Leu Arg Leu Thr Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Val Thr Ile Ser Leu Asp Thr Ser Lys Ser Thr Val Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120 <210> 77

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 77

Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 10 15

Ser Leu Arg Leu Thr Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val $35 \\ 40 \\ 45$

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Lys Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 78

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 78

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 10 15

Thr Leu Arg Leu Thr Cys Ala Val Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Ala Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Leu Thr Phe Ser Leu Asp Asn Ser Lys Asn Pro Pro Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 79

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 79

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Asn Ser Lys Ser Thr Val Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 80

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 80

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Ile Ser Leu Asp Thr Ser Lys Asn Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 81

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Thr Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Val Thr Ile Ser Leu Asp Thr Ser Lys Ser Gln Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 82

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 82

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Thr Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val\$35\$ 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Val Thr Ile Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 83

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 83

Gln Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Thr Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 60

Lys Arg Arg Phe Thr Ile Ser Leu Asp Thr Ser Lys Ser Gln Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120 <210> 84

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 84

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Thr Leu Arg Leu Thr Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Asn Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 85

<211> 122

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 85

Glu Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly Ser
1 5 10 15

Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr His Tyr Gly 20 25 30

Leu Asn Trp Leu Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val Gly 35 40 45

Trp Val Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala Asp Glu Phe Lys 50 55 60

Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr Leu 65 70 75 80

Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala 85 90 95

Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val Trp 100 105 110

Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 86

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 86

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Phe Thr His Tyr 20 25 30

Gly Ile Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val
35 40 45

Gly Trp Ile Asn Thr Asn Asn Gly Glu Pro Thr Tyr Ala Gln Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 87

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 87

Glu Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly
1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Ala His Tyr 20 25 30

Gly Leu Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Val Asn Thr Tyr Thr Gly Glu Ser Thr Tyr Val Pro Glu Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 88

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Ala His Tyr 20 25 30

Gly Val Asn Trp Leu Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala His Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 89

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 89

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Ala Ser Phe 20 25 30

Gly Ile Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Ser Thr Tyr Ala Gln Asp Phe 50 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 90

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 90

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Asp His Phe 20 25 30

Gly Ile Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Val Asp Glu Phe 50 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

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<210> 91
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<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 91

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Asn Asn Tyr 20 25 30

Gly Trp Ile Asn Thr Tyr Asn Gly Glu Pro Thr Tyr Ala Pro Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 92

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 92

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Ser His Phe 20 25 30

Gly Ile Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val\$35\$ 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala His Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 93

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 93

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Ser His Phe 20 25 30

Gly Ile Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Val Pro Glu Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 94

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 94

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Ser Asn Tyr 20 25 30

Gly Leu Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Glu Glu Phe 50 55 60

Thr Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 95

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Thr His Tyr 20 25 30

Gly Leu Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala His Glu Phe 50 55 60

Thr Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser

<210> 96

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 96

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asn Phe Tyr His Tyr 20 25 30

Gly Val Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val 35 40 45

Gly Trp Val Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala Gln Glu Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 97

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 97

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asn Phe Tyr Ser Tyr 20 25 30

Gly Leu Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Gln Glu Phe 50 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

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<210> 98
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<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 98

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Ser Phe Asp His Tyr 20 25 30

Gly Leu Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Asp Glu Phe 50 55 60

Thr Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 99

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 99

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Thr Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 100

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 100

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys $85 \hspace{1cm} 90 \hspace{1cm} 95$

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 101

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 101

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 102

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser

<210> 103

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 103

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Thr Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 104

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 104

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

- <210> 105
- <211> 123
- <212> PRT
- <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 105

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 106

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 106

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Thr His Phe 20 25 30

Gly Leu Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Gln Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 107

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 107

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Leu Ser His Tyr 20 25 30

Gly Leu Asn Trp Ile Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Pro Asp Phe 50 55 60

Thr Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 108

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 108

Glu Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asn Phe Ser His Phe 20 25 30

Gly Trp Ile Asn Thr Tyr Asn Gly Glu Thr Thr Tyr Ala Pro Asp Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro Tyr Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 109

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 109

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asn Phe Ser His Phe 20 25 30

Gly Leu Asn Trp Leu Arg Gln Ala Pro Gly Lys Gly Pro Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Pro Glu Phe 50 55 60

Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser

<210> 110

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 110

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Thr His Phe 20 25 30

Gly Leu Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Val Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala His Glu Phe 50 55 60

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Lys Arg Arg Val Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr
                    70
Leu Gln Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val
                                 105
Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
        115
                            120
<210> 111
<211> 10
<212> PRT
<213> Artificial Sequence
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<400> 111
Gly Phe Asp Phe Thr Asn Tyr Gly Met Asn
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<210> 112
<211> 10
<212> PRT
<213> Artificial Sequence
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Gly Tyr Thr Phe Thr Asn Tyr Gly Met Asn
<210> 113
<211> 10
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 113
Gly Tyr Ser Leu Asp His Tyr Gly Met Asn
                5
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<210> 114
<211> 10
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 114
Gly Tyr Ala Leu Asp His Phe Gly Leu Asn
<210> 115
<211> 10
<212> PRT
<213> Artificial Sequence
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<400> 115
Gly Tyr Asp Phe Tyr Asn Tyr Gly Ile Asn
<210> 116
<211> 10
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 116
Gly Tyr Thr Phe Thr Asn Tyr Gly Met Asn
                5
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                                     10
<210> 117
<211> 10
<212> PRT
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Gly Tyr Ser Phe Asp His Tyr Gly Leu Asn
                5
<210> 118
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<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 118
Gly Tyr Asp Phe Ser Asn Tyr Gly Leu Asn
                5
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<212> PRT
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<223> Description of Artificial Sequence: Synthetic peptide
<400> 119
Gly Tyr Asp Phe Ser His Phe Gly Ile Asn
<210> 120
<211> 10
<212> PRT
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<400> 120
Gly Tyr Asp Phe Ala His Tyr Gly Val Asn
                5
<210> 121
<211> 10
<212> PRT
<213> Artificial Sequence
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<400> 121
Gly Tyr Asp Phe Asp His Phe Gly Ile Asn
                5
                                     10
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<210> 122
<211> 10
<212> PRT
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<223> Description of Artificial Sequence: Synthetic peptide
<400> 122
Gly Tyr Asp Phe Asn Asn Tyr Gly Met Asn
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<211> 10
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<223> Description of Artificial Sequence: Synthetic peptide
<400> 123
Gly Tyr Asp Phe Ala Ser Phe Gly Ile Asn
<210> 124
<211> 10
<212> PRT
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<400> 124
Gly Phe Asn Phe Thr His Tyr Gly Ile Asn
                5
<210> 125
<211> 10
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 125
Gly Tyr Asp Phe Ala His Tyr Gly Leu Asn
                5
<210> 126
<211> 10
<212> PRT
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<400> 126
Gly Tyr Asn Phe Tyr His Tyr Gly Val Asn
                5
<210> 127
<211> 10
<212> PRT
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<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 127
Gly Tyr Asp Phe Thr His Tyr Gly Leu Asn
<210> 128
<211> 10
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<400> 128
Gly Tyr Asn Phe Tyr Ser Tyr Gly Leu Asn
<210> 129
<211> 10
<212> PRT
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<400> 129
Gly Tyr Asp Phe Ser His Phe Gly Ile Asn
                 5
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<210> 130
<211> 10
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<400> 130
Gly Tyr Thr Phe Thr His Tyr Gly Leu Asn
<210> 131
<211> 10
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<400> 131
Gly Tyr Asp Phe Thr His Phe Gly Leu Asn
                5
<210> 132
<211> 10
<212> PRT
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<223> Description of Artificial Sequence: Synthetic peptide
<400> 132
Gly Tyr Asp Leu Ser His Tyr Gly Leu Asn
<210> 133
<211> 10
<212> PRT
<213> Artificial Sequence
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<400> 133
Gly Tyr Asn Phe Ser His Phe Gly Leu Asn
                5
<210> 134
<211> 10
<212> PRT
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Gly Tyr Asn Phe Ser His Phe Gly Leu Asn
<210> 135
<211> 10
<212> PRT
<213> Artificial Sequence
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<400> 135
Gly Tyr Asp Phe Thr His Phe Gly Leu Asn
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<210> 136
 <211> 17
 <212> PRT
<213> Artificial Sequence
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 <223> Description of Artificial Sequence: Synthetic peptide
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 Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala His Glu Phe Thr
                                      10
 Arg
 <210> 137
 <211> 17
 <212> PRT
 <213> Artificial Sequence
 <223> Description of Artificial Sequence: Synthetic peptide
 <400> 137
 Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe Thr
                                      10
 Arg
 <210> 138
 <211> 17
 <212> PRT
 <213> Artificial Sequence
 <223> Description of Artificial Sequence: Synthetic peptide
 <400> 138
 Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Asp Glu Phe Thr
                 5
 Arg
 <210> 139
 <211> 17
 <212> PRT
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 <223> Description of Artificial Sequence: Synthetic peptide
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<400> 139
Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Glu Glu Phe Thr
                 5
Arg
<210> 140
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
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<400> 140
Trp Ile Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Val Pro Glu Phe Lys
                                    10
Arg
<210> 141
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
Trp Ile Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala His Asp Phe Lys
Arg
<210> 142
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 142
Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Val Asp Glu Phe Lys
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Arg

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<210> 143
<211> 17
<212> PRT
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<400> 143
Trp Ile Asn Thr Tyr Asn Gly Glu Pro Thr Tyr Ala Pro Asp Phe Lys
                                     10
Arg
<210> 144
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 144
Trp Ile Asn Thr Tyr Thr Gly Glu Ser Thr Tyr Ala Gln Asp Phe Lys
                 5
Arg
<210> 145
<211> 17
<212> PRT
<213> Artificial Sequence
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<223> Description of Artificial Sequence: Synthetic peptide
<400> 145
Trp Ile Asn Thr Asn Asn Gly Glu Pro Thr Tyr Ala Gln Asp Phe Lys
                                     10
Arg
<210> 146
<211> 17
<212> PRT
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<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 146
Trp Val Asn Thr Tyr Thr Gly Glu Ser Thr Tyr Val Pro Glu Phe Lys
                                     10
Arg
<210> 147
<211> 17
<212> PRT
<213> Artificial Sequence
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<400> 147
Trp Val Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala Gln Glu Phe Lys
Arg
<210> 148
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 148
Trp Ile Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala His Glu Phe Thr
1
                                     10
Arg
<210> 149
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Gln Glu Phe Lys
                5
                                    10
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Arg

Arg

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<210> 150
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 150
Trp Ile Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala His Asp Phe Lys
                                    10
Arg
<210> 151
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
Trp Val Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala Asp Glu Phe Lys
Arg
<210> 152
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 152
Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Gln Asp Phe Lys
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<210> 153
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 153
Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Pro Asp Phe Thr
                                     10
Arg
<210> 154
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 154
Trp Ile Asn Thr Tyr Asn Gly Glu Thr Thr Tyr Ala Pro Asp Phe Lys
                                     10
Arg
<210> 155
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 155
Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Pro Glu Phe Lys
                5
1
                                     10
Arg
<210> 156
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
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<400> 156
Trp Val Asn Thr Tyr Thr Gly Glu Thr Thr Tyr Ala His Glu Phe Lys
Arg
<210> 157
<211> 25
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
                5
                                    10
Ser Leu Arg Leu Ser Cys Ala Ala Ser
<210> 158
<211> 25
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 158
Glu Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly
Ser Leu Arg Leu Ser Cys Ala Ala Ser
            20
<210> 159
<211> 25
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 159
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
                                    10
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Ser Leu Arg Leu Ser Cys Ala Ala Ser 20 25

<210> 160

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 160

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Thr Cys Ala Val Ser 20 25

<210> 161

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 161

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser 20 25

<210> 162

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 162

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Thr Cys Ala Ala Ser 20 25

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<210> 163
<211> 25
<212> PRT
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<223> Description of Artificial Sequence: Synthetic peptide
Glu Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly
                                     10
Thr Leu Arg Leu Thr Cys Ala Ala Ser
<210> 164
<211> 11
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 164
Asn Ala Ser Gln Ser Ile Gly Thr Tyr Leu Ala
<210> 165
<211> 11
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 165
Lys Ala Ser Gln Ser Ile Gly Thr Tyr Leu Ala
1
                5
                                    10
<210> 166
<211> 11
<212> PRT
<213> Artificial Sequence
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<223> Description of Artificial Sequence: Synthetic peptide
<400> 166
His Ala Ser Gln Ser Ile Ser Ser Tyr Leu Ala
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<210> 167
<211> 11
<212> PRT
<213> Artificial Sequence
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<223> Description of Artificial Sequence: Synthetic peptide
Ser Ala Ser Gln Ser Ile Ser Thr Tyr Leu Ala
                5
<210> 168
<211> 11
<212> PRT
<213> Artificial Sequence
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<400> 168
Arg Ala Ser Gln Ser Ile Ser Thr Tyr Leu Ala
                5
<210> 169
<211> 11
<212> PRT
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<400> 169
Lys Ala Ser Gln Ser Ile Gly Ser Tyr Leu Ala
1
                5
                                     10
<210> 170
<211> 11
<212> PRT
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<400> 170
His Ala Ser Gln Ser Ile Ser Thr Tyr Leu Ala
                5
<210> 171
<211> 11
<212> PRT
<213> Artificial Sequence
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<223> Description of Artificial Sequence: Synthetic peptide
<400> 171
Arg Ala Ser Gln Ser Ile Ser Ser Tyr Leu Ala
                5
<210> 172
<211> 11
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 172
Asn Ala Ser Gln Ser Ile Gly Ser Tyr Leu Ala
<210> 173
<211> 11
<212> PRT
<213> Artificial Sequence
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<400> 173
Ser Ala Ser Gln Ser Ile Gly Thr Tyr Leu Ala
<210> 174
<211> 11
<212> PRT
<213> Artificial Sequence
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<400> 174
Lys Ala Ser Gln Ser Ile Ser Thr Tyr Leu Ala
                5
                                    10
<210> 175
<211> 11
<212> PRT
<213> Artificial Sequence
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<223> Description of Artificial Sequence: Synthetic peptide
Asn Ala Ser Gln Ser Ile Ser Thr Tyr Leu Ala
                5
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<210> 176
<211> 11
<212> PRT
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<223> Description of Artificial Sequence: Synthetic peptide
<400> 176
His Ala Ser Gln Ser Ile Gly Thr Tyr Leu Ala
                5
<210> 177
<211> 11
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 177
Gln Ala Ser Gln Ser Ile Ser Thr Tyr Leu Ala
<210> 178
<211> 11
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 178
Arg Ala Ser Gln Ser Ile Ser Thr Tyr Ile Asn
1
                5
<210> 179
<211> 11
<212> PRT
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<223> Description of Artificial Sequence: Synthetic peptide
<400> 179
Arg Ala Ser Arg Asp Ile Arg Asn Asp Leu Ala
<210> 180
<211> 11
<212> PRT
<213> Artificial Sequence
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<220>
<223> Description of Artificial Sequence: Synthetic peptide
Arg Ala Ser Arg Asp Ile Thr Thr Asp Leu Ala
<210> 181
<211> 11
<212> PRT
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<400> 181
Arg Ala Ser Gln Asp Ile Arg Lys Asp Leu Ala
<210> 182
<211> 11
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 182
Arg Ala Ser Gln Ala Ile Arg Asn Asp Leu Thr
                5
<210> 183
<211> 11
<212> PRT
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<223> Description of Artificial Sequence: Synthetic peptide
Arg Ala Ser Gln Ala Ile Tyr Asp Tyr Leu Ala
                5
<210> 184
<211> 11
<212> PRT
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<223> Description of Artificial Sequence: Synthetic peptide
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Arg Ser Ser Gln Pro Ile Thr Asn Asp Leu Ala
<210> 185
<211> 11
<212> PRT
<213> Artificial Sequence
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<400> 185
Arg Ala Ser Arg Asp Ile Arg Asp Asp Leu Ala
<210> 186
<211> 13
<212> PRT
<213> Artificial Sequence
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<223> Description of Artificial Sequence: Synthetic peptide
<400> 186
Ser Gly Ser Ser Ser Asn Val Gly Arg Asn Thr Val Asn
                5
<210> 187
<211> 13
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 187
Ser Gly Ser Thr Ser Asn Ile Gly Ser Asn Pro Val Asn
                                     10
<210> 188
<211> 14
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 188
Thr Gly Arg Ser Ser Asn Ile Gly Ala Gly His Asp Val His
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<210> 189
<211> 13
<212> PRT
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<400> 189
Ser Gly Ser Asn Ser Asn Ile Gly Ser Asn Asn Val Tyr
                5
<210> 190
<211> 13
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 190
Ser Gly Ser Tyr Ser Asn Ile Gly Ser Asn Ala Val Asn
<210> 191
<211> 13
<212> PRT
<213> Artificial Sequence
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<400> 191
Ser Gly Thr Thr Ser Asn Ile Gly Ser Asn Ser Val Asn
                5
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1
<210> 192
<211> 13
<212> PRT
<213> Artificial Sequence
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Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn Ser Val Thr
<210> 193
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Ser Gly Ser Thr Ser Asn Ile Gly Ser Asn Ser Val Thr
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Ser Gly Ser Ser Ser Asn Ile Gly Ser Asn Pro Val Asn
<210> 195
<211> 7
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Gly Ala Ser Asn Leu Ala Ser
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Asp Ala Ser Asn Leu Ala Ser
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<210> 197
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Ser Ala Ser Asn Leu Ala Ser
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Ala Ala Ser Arg Leu Gln Ser
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Ala Ala Ser Thr Leu Gln Ser
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Gly Ala Thr Thr Leu Gln Ser
<210> 202
<211> 7
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Gly Asn Asp Glu Arg Pro Ser
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Ala Ala Ser Asn Leu Ala Ser
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Gly Asn Asn Gln Arg Pro Ser
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Thr Asn Asn Gln Arg Pro Ser
<210> 208
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Gly Asn Asp Gln Arg Pro Ser
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<210> 209
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<400> 209
Ser Asn Asn Gln Arg Pro Ser
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<210> 210
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Gln Gln Tyr Asn Ser Lys Pro Trp Thr
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<210> 211
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Gln Gln Tyr Ser Ser Thr Pro Tyr Thr
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Gln Gln Tyr Asn Ser Thr Pro Trp Thr
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Gln Gln Tyr Tyr Ser Thr Pro Trp Thr
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Gln Gln Tyr Asn Ser Ala Pro Trp Thr
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<400> 216
Gln Gln Tyr Tyr Ser Gly Pro Trp Thr
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<400> 217
Gln Gln Tyr Ser Ser Thr Pro Trp Thr
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<400> 218
Gln Gln Tyr Tyr Ser Ala Pro Trp Thr
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Gln Gln Ser Tyr Ser Thr Pro Trp Thr
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Gln Gln Ser Tyr Thr Ile Pro Trp Thr
<210> 222
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<400> 222
Gln Gln Ser Ser Thr Thr Pro Trp Thr
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<210> 223
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<212> PRT
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Ala Thr Trp Asp Asp Ser Leu Asn Gly Tyr Val
<210> 224
<211> 11
<212> PRT
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<220>
<223> Description of Artificial Sequence: Synthetic peptide
Ala Ser Trp Asp Asp Ser Leu Thr Gly Tyr Val
<210> 225
<211> 11
<212> PRT
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<400> 225
Ala Thr Trp Asp Asp Ser Leu His Gly Tyr Val
<210> 226
<211> 11
<212> PRT
<213> Artificial Sequence
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<400> 226
Gly Ala Trp Asp Asp Ser Leu Asn Gly Tyr Val
                5
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<210> 227
<211> 11
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<400> 227
Ala Ala Trp Asp Asp Ser Leu Asn Gly Tyr Val
                5
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<210> 228
<211> 11
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<220>
<223> Description of Artificial Sequence: Synthetic peptide
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<400> 228
Ala Ala Trp Asp Asp Ser Leu Ser Gly Tyr Val
                5
<210> 229
<211> 23
<212> PRT
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<223> Description of Artificial Sequence: Synthetic peptide
<400> 229
Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
                                    10
Glu Arg Ala Thr Ile Ser Cys
<210> 230
<211> 23
<212> PRT
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<400> 230
Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
                5
                                    10
                                                         15
Glu Arg Ala Thr Ile Thr Cys
            20
<210> 231
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<212> PRT
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                                    10
Glu Arg Ala Thr Ile Thr Cys
            20
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<210> 232
<211> 23
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                                    10
Glu Arg Ala Thr Ile Thr Cys
            20
<210> 233
<211> 23
<212> PRT
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<400> 233
Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
                                    10
Glu Arg Ala Thr Ile Thr Cys
            20
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<211> 23
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<400> 234
Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
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                5
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Glu Arg Ala Thr Ile Ser Cys
<210> 235
<211> 23
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<223> Description of Artificial Sequence: Synthetic peptide
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Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
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Glu Arg Ala Thr Ile Thr Cys
            20
<210> 236
<211> 23
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<400> 236
Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
Glu Arg Ala Thr Ile Ser Cys
            20
<210> 237
<211> 23
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                                    10
Glu Arg Ala Thr Ile Thr Cys
            20
<210> 238
<211> 23
<212> PRT
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<223> Description of Artificial Sequence: Synthetic peptide
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Asp Ile Lys Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
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Glu Arg Ala Thr Ile Ser Cys 20

<210> 239

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 239

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1 5 10 15

Glu Arg Ala Thr Ile Thr Cys
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<210> 240

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 240

Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
1 10 15

Glu Arg Ala Thr Ile Thr Cys
20

<210> 241

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 241

Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
1 10 15

Glu Arg Ala Thr Ile Thr Cys 20

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<210> 242
<211> 23
<212> PRT
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<223> Description of Artificial Sequence: Synthetic peptide
Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
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Glu Arg Ala Thr Ile Ser Cys
            20
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<212> PRT
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<223> Description of Artificial Sequence: Synthetic peptide
<400> 243
Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
                                     10
Glu Arg Ala Thr Ile Thr Cys
            20
<210> 244
<211> 23
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 244
Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
                5
                                     10
1
                                                         15
Glu Arg Ala Thr Ile Thr Cys
<210> 245
<211> 23
<212> PRT
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<223> Description of Artificial Sequence: Synthetic peptide
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<400> 245
Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
Glu Arg Ala Thr Ile Thr Cys
            20
<210> 246
<211> 23
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 246
Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
                5
                                    10
Glu Arg Ala Thr Ile Ser Cys
            20
<210> 247
<211> 23
<212> PRT
<213> Artificial Sequence
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Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
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                5
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Glu Arg Ala Thr Ile Thr Cys
            20
<210> 248
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<212> PRT
<213> Artificial Sequence
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Asp Ile Val Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Pro Gly
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Glu Arg Ala Thr Ile Thr Cys 20

<210> 249

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 249

Asp Ile Lys Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Pro Gly
1 10 15

Glu Arg Ala Thr Ile Thr Cys 20

<210> 250

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 250

Glu Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys 20

<210> 251

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 251

Asp Ile Val Met Thr Gln Thr Pro Ser Ser Leu Ser Ala Ser Val Gly
1 10 15

Asp Thr Val Thr Ile Thr Cys 20

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<210> 252
<211> 23
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Glu Ile Val Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Ile Gly
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Asp Arg Val Ala Ile Thr Cys
            20
<210> 253
<211> 23
<212> PRT
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<400> 253
Glu Ile Val Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                                    10
Asp Arg Val Thr Ile Thr Cys
            20
<210> 254
<211> 23
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<400> 254
Glu Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                5
                                    10
                                                         15
Asp Arg Val Thr Ile Thr Cys
            20
<210> 255
<211> 23
<212> PRT
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<220>
<223> Description of Artificial Sequence: Synthetic peptide
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<400> 255
Glu Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                                    10
                5
Asp Thr Val Thr Ile Ala Cys
<210> 256
<211> 23
<212> PRT
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Ala Ile Arg Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly
                                    10
Asp Thr Val Thr Ile Ala Cys
            20
<210> 257
<211> 23
<212> PRT
<213> Artificial Sequence
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Glu Ile Val Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
Asp Arg Val Thr Ile Thr Cys
            20
<210> 258
<211> 23
<212> PRT
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<223> Description of Artificial Sequence: Synthetic peptide
<400> 258
Glu Thr Thr Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
                5
                                    10
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Asp Thr Ile Thr Ile Ser Cys 20

<210> 259

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 259

Glu Ile Val Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 10 15

Asp Arg Ile Thr Ile Thr Cys 20

<210> 260

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 260

Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Ala Gly $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Asp Arg Val Thr Ile Ser Cys 20

<210> 261

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 261

Gln Pro Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln 1 5 10 15

Arg Val Thr Ile Ser Cys

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<210> 262
<211> 22
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 262
Leu Pro Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
                5
                                     10
Arg Val Thr Ile Ser Cys
            20
<210> 263
<211> 22
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 263
Gln Ser Ala Leu Thr Gln Pro Pro Ser Val Ser Gly Ala Pro Gly Gln
Arg Val Thr Ile Ser Cys
            20
<210> 264
<211> 22
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 264
Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
                                                         15
1
                5
                                     10
Arg Val Thr Ile Ser Cys
            20
<210> 265
<211> 22
<212> PRT
<213> Artificial Sequence
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<223> Description of Artificial Sequence: Synthetic peptide
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<400> 265

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Leu Pro Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
                5
Arg Val Thr Ile Ser Cys
            20
<210> 266
<211> 22
<212> PRT
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Gln Ala Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr Pro Gly Gln
                                    10
Ser Val Thr Ile Ser Cys
            20
<210> 267
<211> 22
<212> PRT
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<223> Description of Artificial Sequence: Synthetic peptide
Gln Pro Val Leu Thr Gln Pro Pro Ser Thr Ser Gly Thr Pro Gly Gln
                                    10
Arg Val Thr Ile Ser Cys
            20
<210> 268
<211> 22
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 268
Asn Phe Met Leu Thr Gln Pro Pro Ser Thr Ser Gly Thr Pro Gly Gln
                                    10
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Arg Val Thr Ile Ser Cys 20

<210> 269

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 269

Gln Pro Val Leu Thr Gln Pro Pro Ser Ala Ser Ala Thr Pro Gly Gln
1 5 10 15

Arg Val Thr Ile Ser Cys 20

<210> 270

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 270

Glu Val Gl
n Leu Val Glu Ser Gly Gly Gly Val Val Gl
n Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser

<210> 271

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 271

Glu Val Gln Leu Val Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Thr Leu Arg Leu Ser Cys Ala Ala Ser 20 25

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<210> 272
<211> 25
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Glu Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly
                                    10
Ser Leu Arg Leu Arg Cys Ala Ala Ser
            20
<210> 273
<211> 25
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 273
Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
Ser Leu Arg Leu Ser Cys Ala Ala Ser
            20
<210> 274
<211> 25
<212> PRT
<213> Artificial Sequence
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<400> 274
Glu Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly
                5
                                    10
                                                        15
1
Thr Leu Arg Leu Ser Cys Ala Ala Ser
            20
<210> 275
<211> 25
<212> PRT
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<220>
<223> Description of Artificial Sequence: Synthetic peptide
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<400> 275
·Glu Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
                                     10
Thr Leu Arg Leu Thr Cys Ala Ala Ser
<210> 276
<211> 25
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Glu Val Gln Leu Val Gln Ser Gly Gly Val Val Gln Pro Gly Gly
Thr Leu Arg Leu Thr Cys Ala Ala Ser
            20
<210> 277
<211> 25
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
Ser Leu Arg Leu Thr Cys Ala Ala Ser
            20
<210> 278
<211> 25
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 278
Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
                                     10
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Ser Leu Arg Leu Ser Cys Ala Ala Ser 20 25

<210> 279

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 279

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser 20 25

<210> 280

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 280

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Thr Cys Ala Ala Ser 20 25

<210> 281

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 281

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Thr Cys Ala Ala Ser 20 25

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<210> 282
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<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 282

Gln Val Gln Leu Val Gln Ser Gly Gly Gly Val Val Gln Pro Gly Gly
1 5 10 15

Thr Leu Arg Leu Thr Cys Ala Ala Ser 20 25

<210> 283

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 283

Glu Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Gln Pro Gly Glu 1 5 10 15

Thr Val Arg Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Lys Gln Ala Pro Gly Lys Gly Leu Lys Trp Met 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Glu Thr Ser Ala Ser Thr Ala Tyr 65 70 75 80

Leu Gln Ile Ser Asn Leu Lys Asn Asp Asp Thr Ala Thr Tyr Phe Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Ala Gly Thr Thr Val Thr Val Ser Ser 115 120 <210> 284

<211> 107

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 284

Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly 1 10 15

Asp Arg Val Ile Ile Ser Cys Ser Ala Ser Gln Asp Ile Ser Asn Tyr 20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Val Leu Ile 35 40 45

Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly 50 55 60

Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Pro 70 75 80

Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Thr Val Pro Trp 85 90 95

Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys 100 105

<210> 285

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 285

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala His Ser Arg His Tyr Tyr Gly Ser Ser Pro Gln Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 286

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 286

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Gly Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110 Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 287

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 287

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Ala Ser His Trp Tyr Phe Asp Val

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 288

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 288

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Gly Cys His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 289

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 289

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Gly Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 290

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 290

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Gly Tyr Asn Gln Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 291

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 291

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 292

<211> 70

<212> PRT

<213> Mus sp.

<400> 292

Glu Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Gln Pro Gly Glu 1 5 10 15

Thr Val Arg Ile Ser Cys Lys Ala Ser Trp Val Lys Gln Ala Pro Gly
20 25 30

Lys Gly Leu Lys Trp Met Gly Arg Phe Thr Phe Ser Leu Glu Thr Ser 35 40 45

Ala Ser Thr Ala Tyr Leu Gln Ile Ser Asn Leu Lys Asn Asp Asp Thr 50 55 60

Ala Thr Tyr Phe Cys Ala

<210> 293

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 293

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Arg Ser Gln Trp Tyr Leu Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 294

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 294

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Ser Arg Thr Cys Gln Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 295

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 295

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Ser Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 296

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 296

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Phe Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 297

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 297

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr His Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 298

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 298

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Asn Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 299

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 299

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Asn Ser Thr Ser His Trp Tyr Phe Asp Val 100 105 110 Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 300

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 300

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Ser Gly Thr Ser His Trp Tyr Phe Asp Val

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 301

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 301

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Ser Gly Thr Ser His Trp Tyr Phe Asp Tyr 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 302

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 302

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 303

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 303

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 304

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 304

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Gly Ser Ser Ser Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 305

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 305

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Pro Tyr Tyr Tyr Ser Thr Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 306

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 306

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Lys Tyr Arg Asp Phe Asn Gly Ser Ser His Trp Tyr Phe Asp Val 100 105 110 Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 307

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 307

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Ser Tyr Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 308

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 308

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly 1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Ala Arg His Tyr Tyr Gly Ser Ser His Cys Tyr Phe Asp Leu 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 309

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 309

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys 85 90 95

Ala Arg Asp Ser His Tyr Tyr Gly Ser Ser His Gln Tyr Phe Asp Leu 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 310

<211> 123

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic polypeptide

<400> 310

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr Asn Tyr 20 25 30

Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45

Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe 50 55 60

Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr 65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Ala Lys Tyr Pro His Tyr Tyr Gly Thr Ser His Trp Tyr Phe Asp Val 100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser 115 120

<210> 311

<211> 17

<212> PRT

<213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 311
Cys Ala His Ser Arg His Tyr Tyr Gly Ser Ser Pro Gln Tyr Phe Asp
                                    10
Val
<210> 312
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 312
Cys Ala Lys Tyr Gly Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp
Val
<210> 313
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 313
Cys Ala Lys Tyr Pro His Tyr Tyr Gly Ala Ser His Trp Tyr Phe Asp
                                    10
1
Val
<210> 314
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 314
Cys Ala Lys Tyr Pro His Tyr Tyr Gly Gly Cys His Trp Tyr Phe Asp
                                    10
```

Val

```
<210> 315
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 315
Cys Ala Lys Tyr Pro His Tyr Tyr Gly Gly Ser His Trp Tyr Phe Asp
                                    10
                5
Val
<210> 316
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 316
Cys Ala Lys Tyr Pro His Tyr Tyr Gly Gly Tyr Asn Gln Tyr Phe Asp
                5
                                    10
Val
<210> 317
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 317
Cys Ala Lys Tyr Pro His Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp
```

Val

```
<210> 318
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Cys Ala Lys Tyr Pro His Tyr Tyr Gly Arg Ser Gln Trp Tyr Leu Asp
Val
<210> 319
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 319
Cys Ala Lys Tyr Pro His Tyr Tyr Ser Arg Thr Cys Gln Tyr Phe Asp
Val
<210> 320
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 320
Cys Ala Lys Tyr Pro His Tyr Tyr Ser Ser His Trp Tyr Phe Asp
                5
                                    10
                                                         15
1
Val
<210> 321
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
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<400> 321
Cys Ala Lys Tyr Pro Tyr Phe Tyr Gly Ser Ser His Trp Tyr Phe Asp
Val
<210> 322
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 322
Cys Ala Lys Tyr Pro Tyr Tyr His Gly Ser Ser His Trp Tyr Phe Asp
Val
<210> 323
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 323
Cys Ala Lys Tyr Pro Tyr Tyr Asn Gly Ser Ser His Trp Tyr Phe Asp
Val
<210> 324
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 324
Cys Ala Lys Tyr Pro Tyr Tyr Asn Ser Thr Ser His Trp Tyr Phe Asp
                                     10
```

Val

```
<210> 325
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 325
Cys Ala Lys Tyr Pro Tyr Tyr Ser Gly Thr Ser His Trp Tyr Phe Asp
        5
                                    10
Val
<210> 326
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 326
Cys Ala Lys Tyr Pro Tyr Tyr Ser Gly Thr Ser His Trp Tyr Phe Asp
               5
                                    10
Tyr
<210> 327
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Cys Ala Lys Tyr Pro Tyr Tyr Gly Arg Ser His Trp Tyr Phe Asp
                                    10
Val
<210> 328
<211> 17
<212> PRT
<213> Artificial Sequence
```

```
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 328
Cys Ala Lys Tyr Pro Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp
                                    10
Val
<210> 329
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 329
Cys Ala Lys Tyr Pro Tyr Tyr Gly Ser Ser Ser Trp Tyr Phe Asp
                                    10
Val
<210> 330
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 330
Cys Ala Lys Tyr Pro Tyr Tyr Ser Thr Ser His Trp Tyr Phe Asp
                5
                                    10
                                                        15
Val
<210> 331
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 331
Cys Ala Lys Tyr Arg Asp Phe Asn Gly Ser Ser His Trp Tyr Phe Asp
                5
                                    10
```

Val

```
<210> 332
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
Cys Ala Lys Tyr Ser Tyr Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp
Val
<210> 333
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 333
Cys Ala Arg Ala Arg His Tyr Tyr Gly Ser Ser His Cys Tyr Phe Asp
Leu
<210> 334
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 334
Cys Ala Arg Asp Ser His Tyr Tyr Gly Ser Ser His Gln Tyr Phe Asp
```

10

Leu

```
<210> 335
<211> 17
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic peptide
<400> 335
Cys Ala Lys Tyr Pro His Tyr Tyr Gly Thr Ser His Trp Tyr Phe Asp
Val
<210> 336
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 336
Cys Ala Lys Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp
Val
<210> 337
<211> 17
<212> PRT
<213> Artificial Sequence
<223> Description of Artificial Sequence: Synthetic peptide
<400> 337
Cys Ala Lys Tyr Pro Tyr Tyr Gly Thr Ser His Trp Tyr Phe Asp
                5
                                    10
                                                         15
Val
<210> 338
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Xaa Xaa Xaa Ile Xaa Cys Xaa Xaa Ser Xaa Xaa Ile Xaa Xaa
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             20
                                 25
Xaa Xaa Trp Tyr Gln Gln Xaa Pro Gly Xaa Ala Pro Xaa Xaa Leu Xaa
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35

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Tyr Xaa Xaa Xaa Leu Xaa Xaa Gly Val Xaa Xaa Arg Phe Ser Gly
                        55
Xaa Xaa Ser Gly Thr Asp Phe Xaa Leu Thr Ile Xaa Xaa Leu Gln Xaa
Xaa Asp Xaa Ala Xaa Tyr Tyr Cys Gln Gln Xaa Xaa Xaa Pro Xaa
Thr Phe Gly Xaa Gly Thr Lys Xaa Xaa Ile Lys
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Xaa Val Thr Ile Ser Cys Ser Gly Xaa Xaa Ser Asn Xaa Gly Xaa Asn
Xaa Val Xaa Trp Tyr Gln Gln Xaa Pro Gly Xaa Ala Pro Lys Xaa Leu
Xaa Tyr Xaa Asn Xaa Xaa Arg Pro Ser Gly Val Pro Xaa Arg Xaa Ser
Gly Ser Xaa Ser Xaa Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Xaa
                    70
Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Xaa Xaa Trp Asp Asp Ser Leu
                85
                                    90
Xaa Gly Tyr Val Phe Gly Xaa Gly Thr Xaa Leu Thr Val Leu
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<221> MOD RES
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<223> Met, Leu, Ile or Val
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                                 25
Gly Xaa Asn Trp Xaa Arg Gln Ala Pro Gly Lys Gly Xaa Glu Trp Val
        35
                             40
Gly Trp Xaa Asn Thr Xaa Xaa Gly Xaa Xaa Thr Tyr Xaa Xaa Phe
    50
                         55
Xaa Arg Arg Xaa Thr Xaa Ser Xaa Xaa Ser Lys Xaa Xaa Xaa Tyr
                    70
                                         75
65
Leu Gln Xaa Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
                85
                                     90
                                                          95
Ala Xaa Tyr Pro Xaa Tyr Tyr Gly Xaa Ser His Trp Tyr Phe Asp Val
            100
Trp Xaa Gln Gly Thr Leu Val Thr Val
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Arg
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<223> Ala or Val
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                                     10
                                                         15
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Xaa Leu Arg Leu Xaa Cys Ala Xaa Ser
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                                 25
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Gly Trp Xaa Asn Thr Xaa Xaa Gly Xaa Xaa Thr Tyr Xaa Xaa Yaa Phe 50 55 60

Xaa Arg Arg Xaa Thr Xaa Ser Xaa Xaa Ser Lys Xaa Xaa Xaa Tyr 65 70 75 80

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Trp Xaa Gln Gly Thr Leu Val Thr Val 115 120

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Val Trp Gly

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                                                       15
Xaa Arg Xaa Xaa Ile Xaa Cys Xaa Ala Ser Gln Asp Xaa Xaa Xaa
                                25
           20
Xaa Xaa Trp Tyr Gln Gln Lys Pro Xaa Xaa Xaa Xaa Xaa Leu Ile
        35
                           40
Tyr Xaa Xaa Ser Xaa Xaa Xaa Gly Val Pro Xaa Arg Phe Xaa Gly
    50
Xaa Xaa Ser Gly Thr Asp Xaa Xaa Xaa Thr Ile Ser Xaa Xaa Xaa
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Glu Asp Xaa Ala Xaa Tyr Tyr Cys Gln Gln Xaa Xaa Thr Xaa Pro Xaa 85 90 95
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<223> Met, Leu, Val or Ile
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<223> Ala, Pro, Asp, Glu, His or Gln
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      or Trp
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Xaa Leu Arg Leu Xaa Cys Ala Xaa Ser Gly Xaa Xaa Xaa Xaa Xaa
Xaa Xaa Asn Trp Xaa Arg Gln Ala Pro Gly Lys Gly Xaa Glu Trp Val
                          40
Gly Trp Xaa Asn Thr Xaa Xaa Gly Glu Xaa Thr Tyr Xaa Xaa Xaa Phe
Xaa Arg Arg Xaa Thr Xaa Ser Xaa Asp Xaa Ser Lys Xaa Xaa Xaa Tyr
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Leu Gln Xaa Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
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<223> Description of Artificial Sequence: Synthetic peptide

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Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Gln Val Leu Ile Tyr
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Gly Val Pro Gly Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Tyr Cys
<210> 353
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Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
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<210> 354
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<210> 355
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Gly Val Pro Asn Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
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Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Tyr Cys
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<210> 361
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Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Lys Val Leu Ile Tyr
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Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
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Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Ser Val Leu Ile Tyr
                                     10
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Gly Val Pro Gly Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr
Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Phe Ala Val Tyr Tyr Cys
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Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Tyr Cys
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Gly Val Pro Gly Arg Phe Ser Gly Ser Arg Ser Gly Thr Asp Phe Thr
Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Val Tyr Tyr Cys
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Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro His Val Leu Ile Tyr
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<210> 369
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<212> PRT
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Gly Val Pro Asn Arg Phe Ser Gly Ser Arg Ser Gly Thr Asp Phe Thr
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Leu Thr Ile Ser Ser Leu Gln Pro Asp Asp Phe Ala Val Tyr Tyr Cys
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Phe Gly Gly Gly Thr Lys Val Ala Ile Lys
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Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr
<210> 372
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Leu Thr Ile Arg Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys
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Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
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Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Glu Leu Leu Ile Tyr
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Leu Thr Ile Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys
<210> 376
<211> 10
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Phe Gly Gln Gly Thr Lys Val Asp Ile Lys
                5
<210> 377
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Trp Tyr Gln Gln Ile Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr
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Trp Tyr Gln Gln Lys Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr
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Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Asn Leu Leu Ile Tyr
<210> 384
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Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Val Leu Ile Tyr
<210> 385
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Trp Tyr Gln Gln Phe Pro Gly Thr Ala Pro Lys Phe Leu Met Tyr
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Leu Ala Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys
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<210> 388
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Phe Gly Thr Gly Thr Gln Leu Thr Val Leu
<210> 389
<211> 15
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Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Ile Tyr
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Gly Val Pro Asp Arg Leu Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser
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Leu Ala Ile Ser Gly Leu Leu Ser Glu Asp Glu Ala Asp Tyr Tyr Cys
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<210> 391
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Phe Gly Thr Gly Thr Lys Val Thr Val Leu
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<211> 15
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Trp Tyr Gln Gln Phe Pro Gly Thr Ala Pro Lys Val Leu Ile Tyr
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<210> 394
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Phe Gly Thr Gly Thr Lys Leu Thr Val Leu
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Trp Tyr Gln Gln Leu Pro Gly Ala Ala Pro Lys Val Leu Met Tyr
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Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser
Leu Ala Ile Ser Gly Leu Arg Ser Glu Asp Glu Ala Asp Tyr Tyr Cys
                                25
<210> 397
<211> 15
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Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Val Leu Ile Tyr
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                                     10
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Gly Val Pro Asp Arg Phe Ser Gly Ser Arg Ser Ala Thr Ser Ala Ser
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Leu Ala Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys
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<210> 399
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Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Val Leu Met Tyr
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Gly Val Pro Glu Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser
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Leu Ala Ile Ser Gly Leu Gln Ser Glu Asp Glu Ala Asp Tyr Tyr Cys
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Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Ser Thr Ala Tyr Leu Gln
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Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
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Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
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Arg Phe Thr Phe Ser Leu Asp Thr Ser Lys Asn Thr Ala Tyr Leu Gln
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Leu Asn Ser Leu Arq Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
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Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala

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Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
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Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
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<400> 412
Arg Phe Thr Ile Ser Leu Asp Asn Ser Lys Ser Gln Ala Tyr Leu Gln
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<211> 11
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<220>
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<223> Description of Artificial Sequence: Synthetic peptide

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Trp Ala Gln Gly Thr Leu Val Thr Val Ser Ser
<210> 414
<211> 31
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Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
<210> 415
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Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
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                                     10
Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
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Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
                                25
            20
<210> 418
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Leu Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
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Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala
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<223> Description of Artificial Sequence: Synthetic polypeptide

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<400> 427
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<210> 428
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<212> DNA
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<223> Description of Artificial Sequence: Synthetic primer
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<210> 439 <211> 35 <212> DNA <213> Artificial Sequence	

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ttaattgcgg ccgctttaat ctccagtcgt gtccc
<210> 440
<211> 31
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<210> 441
<211> 31
<212> DNA
<213> Artificial Sequence
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<400> 441
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ttaattgcgg ccgcgaggac ggtcagctgg g
<210> 442
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<212> PRT
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<223> Description of Artificial Sequence: Synthetic peptide
<400> 442
Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser
                                   10
<210> 443
<211> 6
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<223> Description of Artificial Sequence: Synthetic 6xHis tag
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His His His His His
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